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Relative Position of Farmer-Feeders in the Increasingly Competitive Cattle Feeding Business

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Farmer-feeders can potentially compete with anyone in the cattle feeding business. They have traditionally had many built-in advantages. By feeding the cattle on the farm where the grain and roughage are grown, drying, handling, shrinkage and transportation costs are reduced, and returns can be increased per acre by being able to market roughages and silages through cattle. In addition, there are fewer people obtaining a profit out of both the cattle and the feed when cattle are fed at the source of the feed. Another plus factor that will become increasingly important is that pollution is not as big a problem for the farmer-feeder, as effective use of feedlot wastes can be made by using them to maintain the fertility of the soil where the crops were grown.

With all of these advantages, why does it appear that it is becoming increasingly difficult for the farmer-feeder to compete, and what must he do to maintain his advantages in the cattle feeding business?

1. He must improve the nutritional management of his cattle feeding operation. As margins become smaller and with increased competition from other more efficient feeders, it is becoming more critical to obtain the maximum amount of gains and profits from the feeds grown and marketed through the cattle. This means that the feeds must be put together in the right proportions to get the most economical gains in combination with getting maximum returns per acre. Many feeders feel like maximum returns per acre are obtained by feeding the cattle only home-grown roughages that cannot be marketed any other way. In many cases, however, it would be more economical to add some grain so that economical gains could be obtained but would still allow large amounts of roughages to be used.

For example, what are the economics of growing cattle at a 1 lb. vs. 1.5 lb. vs. 2 lb. per day gain and finishing cattle at a 2.1 vs. 2.5 vs. 3.0 lb. per day gain? An example of the effects of growing cattle at different rates of gain on returns per acre of roughage fed are shown in table 1.

Even with small profits on the cattle and compensatory gain during the finishing period on those grown at low rates of gain the greatest net return per acre of roughage fed is most likely to be at the higher rates of gain. More cattle would be required to utilize the same number of acres of roughage, however, requiring more capital, facilities and labor. The important point here is that returns per acre for farming and feeding operations are a combination of profits on the cattle and dollar value of the roughage fed. The feeder must find the combination that will allow him to market the greatest amount of his home-grown roughages through the cattle and still obtain economical gains and satisfactory returns per acre for the total operation.

A similar example of the effect of rate of gain on total cost of gain can be given for the finishing period as shown in table 2.

A summary of the presentation given at Cattle Feeders Day, October 1, 1971.

The important point here is that most nonfeed costs remain constant regardless of rate of gain, and this fact can no longer be ignored by cattle feeders as fixed costs such as interest and equipment costs continue to increase. The cost of nutrients from roughages must be considerably less than the cost of nutrients from grains to justify finishing cattle at low rates of gain. The system that may be the most efficient overall from the standpoint of performance of the cattle and maximizing returns per acre for the farmer-feeding operation is a two-phase system where cattle are grown at 1.8 to 2.0 lb. per day for about 120 to 140 days and then finished on a high-energy ration for maximum rate of gain.

2. Another important factor feeders can no longer ignore is getting the cattle marketed at the right time. At the present time this ideally would be when they reach the low choice grade at the desired weights. The effect of body weight of steers and heifers on cost of gain is shown in table 3.

This also involves feeding the kind of cattle that have the ability to gain rapidly and efficiently and still reach market at the desirable weight and grade.

3. Farmer-feeders must start doing a better job of ration formulation, and they must start using the feed additives that are known to improve performance. Every cattle feeder should be using one of the growth stimulants such as stilbestrol, MGA, Ralgro, Rapigain or Synovex H or S at the recommended level. These give an extra 10 to 15% boost in gains and feed efficiency, and failure to use them can be one of the largest losses in profits for many feeders. Also, not properly balancing the ration may be costing another 5 to 10% in increased cost of gain. Much improvement in performance could be achieved by simply applying what we presently know about ration formulation rather than looking for some new or exotic product to increase performance. Much of the poor performance of cattle is blamed on weather conditions and on the cattle. Actually, often a large proportion of the failure of cattle to perform in the feedlot is due to improper ration formulation and ration quality control or some other management factor.

4. Farmer-feeders must do a better job of feedbunk management. This means getting the cattle on feed as soon as possible and then keeping feed intake at maximum levels. The first portion of the feed consumed is used for maintenance and that consumed in addition to the maintenance requirement will be used for gain. All too often poor feed consumption occurs because of stale or unpalatable feed in the bunk, poor quality control of the ration, cattle being out of feed for extended periods, and poor lot conditions. Farmers should stop field work at the appropriate time and check the feedbunks. Likewise, more net returns may be realized if stale or spoiled feed is thrown away. The importance of feed intake on costs of gain is shown in table 4.

5. Cattle feeders must market rather than just sell cattle. The cattle feeder should know as much about what his cattle are worth as does the buyer. In discussing price the feeder should know what the weighing conditions will be for the price he is offered. If selling on the rail, he should know the conditions of sale such as who stands the reduction in price for the cattle that don't grade choice, how quickly the cattle will be graded after slaughter and if he has the privilege of getting a regrade. New ways must be found for cattle feeders to obtain market information more efficiently, and we must continue to look for ways to do a better job of marketing our cattle.

In summary, farmer-feeders can probably still do a more efficient job of feeding cattle than anyone else. To maintain his competitive position in the

future, however, he will need to be as efficient at cattle feeding as his operation will allow. Because of his diversification, he should seek help from specialists such as professional nutritionists and veterinarians who are qualified to help him solve his nutritional and health problems and to help him find ways to make the most efficient use of the resources he has available.

Table 1. Projected Returns Per Acre of Roughage Fed During the Growing Phase

	Alfalfa hay	Alfalfa hay plus 3 lb. corn	Alfalfa hay plus 6 lb. corn
Expected avg. daily gain, lb.	1.0	1.5	2.0
Expected avg. daily feed, air dry, lb.	16	16	16
Daily feed cost, cents[a]	0.16	0.19	0.22
Feed cost per lb. gain, cents	0.16	0.127	0.11
Overhead costs per day, cents[b]	0.10	0.10	0.10
Feed plus overhead cost, cents	0.26	0.29	0.32
Total cost of gain per lb., cents	0.26	0.193	0.16
Expected sale value of 750 lb. steers, $	230.00	230.00	230.00
Expected cost of 450 lb. steers, $	160.00	160.00	160.00
Expected total cost of 300 lb. of gain, $	78.00	57.90	48.00
Net returns on cattle per head, $	-8.00	12.10	22.00
Steers fed/acre of hay (4 ton yield)	1.7	3.1	5.3
Profits from steers per acre of hay fed, $	-13.60	37.51	116.60
Value of hay, $ per acre	80.00	80.00	80.00
Net returns per acre of hay fed, $	66.40	117.51	196.60

[a] Based on alfalfa hay at $20.00 per ton and shelled corn at $1.12 per bushel.
[b] Includes estimates of building and equipment use, death loss, salt and minerals, veterinary and medical expenses, taxes, interest, a share of the general farm overhead costs and some labor.

Table 2. Projected Total Costs of Gain During the Finishing Phase

	Percent concentrates in finishing ration		
	50%	70%	90%
Expected gain, lb.	2.1	2.5	3.0
Estimated feed cost/day, cents	0.32	0.40	0.47
Estimated overhead cost/day, cents	0.10	0.10	0.10
Estimated total cost/day, cents	0.42	0.50	0.57
Estimated cost/lb. gain, cents	0.21	0.20	0.19
Increased return, dollars/steer on 300 lb. of gain	--	3.00	6.00

Table 3. Estimated Cost of Gain of Cattle of Different Weights on an 85% Concentrate Ration Costing $2.40 Per Hundredweight at Average or Above Average Expected Feed Intakes[a]

Weight of Cattle	800 lb.	900 lb.	1000 lb.	1100 lb.	1200 lb.	1300 lb.
	Expected Total Cost of Gain, Cents					
Steer on a high energy finishing ration	0.20	0.21	0.23	0.25	0.27	0.30
Heifer on a high energy finishing ration	0.23	0.24	0.27	0.30	--	--

[a] Based on the average feedlot steer that will reach the Choice grade at 1050 to 1100 lb. and the average feedlot heifer that will reach the Choice grade at 850 to 900 lb. As cattle reach the heavier weights shown above, the costs of gain could be considerably higher than those shown here because of the difficulty of maintaining a high feed intake in heavier cattle.

Table 4. Expected Daily Gains and Total Cost of Gains of 900 Pound Cattle on a Finishing Ration Costing $2.40 Per Hundredweight on an Air Dry Basis

Daily lb. feed intake, 10% moisture basis	Lb. feed for maintenance	Steers			Heifers		
		Expected daily gain, lb.	Feed cost per lb. gain, cents	Total cost per lb. gain, cents	Expected daily gain, lb.	Feed cost per lb. gain, cents	Total cost per lb. gain, cents
16	8.4	1.7	0.22	0.28	1.6	0.25	0.30
18	8.4	2.1	0.20	0.25	1.9	0.23	0.28
20	8.4	2.5	0.19	0.23	2.2	0.22	0.26
22	8.4	2.9	0.18	0.22	2.6	0.21	0.24
24	8.4	3.3	0.175	0.21	2.9	0.20	0.23